

REMARKS

Claims 1-17 are pending in this application, and have been amended to define still more clearly what Applicant regards as his invention. Non-elected Claims 18-25 have been canceled without prejudice or disclaimer of subject matter. Claims 1, 11, 12 and 17 are in independent form.

Claims 1-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,100,996 (Amano).

As is described in the present application, rasterization of data for printing is a complex process, which can be (and conventionally is) performed in many different ways. Which way is best depends on the characteristics of the data being processed. Among variations that can usefully be selected to obtain the best possible output quality are the size of a dither matrix, and the use of black toner alone versus using a mixture of toners, but many others are involved as well. The present invention provides a technique by which the selection of the best processing method can be refined.

Independent Claim 1 is directed to an image processing apparatus, that comprises generation means, for generating a bitmap image on the basis of inputted object data, and hold means, for holding attribute information representing plural types of attributes of the inputted object data in correspondence with each pixel of a bitmap image generated by the generation means. Also provided are conversion means, for converting the bitmap image into data capable of being processed by an image output unit, and switch means, for switching the contents of processing in the conversion means on the basis of a

combination of the plural types of attributes represented by the attribute information held by the hold means.

One important feature of the apparatus recited in independent Claim 1, is holding attribute information representing *plural types of attributes* in correspondence with each pixel of the bitmap image, and switching among different types of conversion processing on the basis of a combination of the plural types of attributes. By virtue of this feature, it is possible to provide finer control of the processing.^{1/}

Amano relates to image processing in which a switching of conversion process is made. The switching is between use of a dither matrix (Fig. 7) and use of a gamma correction method (Fig. 9), and is based on the type of image present in the portion of an image under consideration (such as, character area, graphic area, or bitmap image area). However, unlike the apparatus of Claim 1, the *Amano* approach does not assign *plural* types of attributes to each pixel, and does not utilize a combination of such plural types of attribute to determine which conversion process is to be used.

For at least this reason, it is believed plain that Claim 1 is allowable over *Amano*.

Similarly, each of the other independent claims recites the use of plural types of attributes to select conversion processing, and is also deemed allowable over *Amano* for at least that reason.

^{1/} The support for this feature is found, at least, at page 36, line 13, to page 41, line 17, and in Fig. 26 (fourth embodiment). The content of the image processing is determined based on a combination of the plural types of attributes (in the example given, bitmap flag, color flag, and character flag; it is to be understood, of course, that the scope of the claims is not limited by the details of this example, or by any other details of the disclosure).

The other claims in this application depend from one or another of the independent claims discussed above, and, therefore, are submitted to be patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, individual reconsideration of the patentability of each claim on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



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